



Mineral Industry Surveys

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COBALT IN JANUARY 2007

U.S. cobalt consumption in January 2007 was slightly higher than consumption during December 2006, according to the U.S. Geological Survey. The amount of cobalt contained in U.S. imports of cobalt metals and chemicals was 5% higher in 2006 than that imported in 2005. The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals was 17% higher in 2006 than that of 2005.

Update

Prices for electrolytic cobalt, in dollars per pound from Platts Metals Week, are listed below.

<u>Month</u>	<u>Price range</u>	<u>Average price</u>
January	24.00-27.00	25.44

TABLE 1
U.S. REPORTED CONSUMPTION OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Metal ²	Oxide and other chemical compounds ³	Scrap	Total
2006:				
January ^r	326	227	170	723
February ^r	318	229	163	710
March ^r	323	231	168	722
April ^r	301	224	171	696
May ^r	317	239	176	732
June ^r	311	234	164	709
July ^r	306	227	158	691
August ^r	311	235	175	721
September ^r	305	229	168	702
October ^r	321	232	158	711
November ^r	308	222	166	696
December ^r	297	229	162	688
January-December ⁴	3,740	2,760	2,000	8,500
2007:				
January	309	226	172	707

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes metal powder.

³Data may include other cobalt materials.

⁴Data based on monthly reports.

TABLE 2
U.S. REPORTED CONSUMPTION OF COBALT, BY END USE¹

(Metric tons, contained cobalt)

End use	2006		2007
	January	January- December ²	January
Steel	52 ^r	588 ^r	49
Superalloys	314 ^r	3,630 ^r	305
Magnetic alloys	25 ^r	299 ^r	25
Other alloys ³	W	W	W
Cemented carbides ⁴	68 ^r	796 ^r	66
Chemical and ceramic uses ⁵	240 ^r	2,910 ^r	239
Miscellaneous and unspecified	23 ^r	271 ^r	23
Total	723 ^r	8,500 ^r	707

^rRevised. W Withheld to avoid disclosing company proprietary data; included with "Miscellaneous and unspecified."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Data based on monthly reports.

³Includes nonferrous alloys, welding materials, and wear-resistant alloys.

⁴Includes diamond tool matrices, cemented and sintered carbides, and cast carbide dies or parts.

⁵Includes catalysts, driers in paints or related usages, feed or nutritive additives, glass decolorizer, ground coat frit, pigments, and other uses.

TABLE 3
U.S. REPORTED STOCKS OF COBALT MATERIALS¹

(Metric tons, contained cobalt)

Period	Industry ²			Total	U.S. Government, metal ⁵
	Metal ³	Oxide and other chemical compounds ⁴	Scrap		
2006:					
January	301 ^r	183 ^r	120 ^r	604 ^r	1,520
February	311 ^r	179 ^r	123 ^r	613 ^r	1,500
March	322 ^r	172 ^r	128 ^r	622 ^r	1,480
April	326 ^r	170 ^r	120 ^r	616 ^r	1,480
May	322 ^r	179 ^r	106 ^r	607 ^r	1,480
June	306 ^r	168 ^r	115 ^r	589 ^r	1,480
July	323 ^r	165 ^r	120 ^r	608 ^r	1,470
August	316 ^r	164 ^r	118 ^r	598 ^r	1,470
September	304 ^r	160 ^r	116 ^r	580 ^r	1,470
October	296 ^r	170 ^r	120 ^r	586 ^r	1,420
November	289 ^r	171 ^r	126 ^r	586 ^r	1,300
December	288 ^r	176 ^r	126 ^r	590 ^r	1,290
2007:					
January	293	180	125	598	1,250

^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Stocks reported by cobalt processors and consumers.

³Includes metal powder.

⁴Data may include other cobalt materials.

⁵Data from Defense National Stockpile Center. Includes material committed for sale pending shipment.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Metals ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2005:								
December	379,000	\$11,000,000	108,000	\$2,380,000	271,000	\$2,850,000	555,000	11,100,000
January-December	9,350,000	312,000,000	1,310,000	35,100,000	2,200,000	24,800,000	11,100,000	XX
2006:								
January	906,000	25,000,000	79,300	1,890,000	245,000	2,830,000	1,060,000	1,060,000
February	571,000	15,600,000	102,000	2,200,000	317,000	3,720,000	775,000	1,830,000
March	1,160,000	30,300,000	115,000	2,620,000	196,000	2,230,000	1,320,000	3,150,000
April	942,000	26,500,000	121,000	2,850,000	165,000	1,640,000	1,090,000	4,240,000
May	640,000	19,300,000	102,000	2,360,000	195,000	2,450,000	790,000	5,030,000
June	969,000	29,500,000	42,700	1,220,000	278,000	2,310,000	1,080,000	6,110,000
July	741,000	21,800,000	85,500	2,230,000	286,000	3,030,000	900,000	7,010,000
August	694,000	21,300,000	91,700	2,260,000	217,000	1,850,000	825,000	7,840,000
September	1,110,000	36,100,000	105,000	2,770,000	83,600	874,000	1,210,000	9,050,000
October	579,000	20,800,000	103,000	2,730,000	170,000	1,800,000	706,000	9,760,000
November	720,000	23,500,000	113,000	3,280,000	105,000	982,000	830,000	10,600,000
December:								
Australia	20,500	647,000	--	--	--	--	20,500	449,000
Belgium	43,600	1,100,000	32,500	932,000	7,000	60,100	68,900	533,000
Brazil	20,000	654,000	--	--	--	--	20,000	272,000
Canada	67,800	2,520,000	--	--	--	--	67,800	967,000
China	331,000	10,400,000	31,000	580,000	2,630	29,000	354,000	1,510,000
Congo (Kinshasa)	--	--	--	--	--	--	--	31,000
Cote d'Ivoire	--	--	--	--	--	--	--	2,590
Finland	28,400	1,160,000	17,400	473,000	32,900	222,000	49,200	899,000
France	1,690	65,300	--	--	--	--	1,690	36,000
Germany	--	--	648	42,000	--	--	467	20,800
India	--	--	--	--	16,200	102,000	4,370	118,000
Italy	--	--	--	--	--	--	--	684
Japan	14,500	603,000	--	--	--	--	14,500	204,000
Korea, Republic of	10,700	80,000	--	--	1,030	15,300	11,000	20,300
Kyrgyzstan	--	--	--	--	--	--	--	3,390
Morocco	10,000	478,000	--	--	--	--	10,000	257,000
Norway	143,000	5,160,000	--	--	--	--	143,000	2,230,000
Philippines	--	--	--	--	--	--	--	19,500
Russia	143,000	6,280,000	--	--	--	--	143,000	2,630,000
South Africa	1,000	42,000	--	--	--	--	1,000	138,000
Sweden	102	4,070	--	--	--	--	102	3,540
Switzerland	--	--	--	--	--	--	--	47
Taiwan	--	--	--	--	--	--	--	360
Uganda	--	--	--	--	--	--	--	133,000
United Kingdom	1,290	28,300	33,700	1,020,000	8,620	105,000	27,600	236,000
Zambia	80,000	3,080,000	--	--	--	--	80,000	885,000
Total	917,000	32,300,000	115,000	3,040,000	68,400	533,000	1,020,000	11,600,000
January-December	9,950,000	302,000,000	1,180,000	29,400,000	2,330,000	24,200,000	11,600,000	XX

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

³Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

⁴Customs value.

⁵Estimated from gross weights.

⁶May include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY ¹

(Kilograms, gross weight of material, except as noted)

Period and country of origin	Unwrought cobalt alloys		Cobalt waste and scrap		Wrought cobalt and cobalt articles	
	Quantity	Value ²	Quantity	Value ²	Quantity	Value ²
2005:						
December	35,200	\$350,000	53,600	\$363,000	21,700	\$1,510,000
January-December	101,000	2,690,000	815,000	7,880,000	256,000	17,700,000
2006:						
January	385	14,000	59,800	1,090,000	14,600	1,140,000
February	1,380	53,700	68,200	441,000	12,700	1,080,000
March	1,570	74,900	55,200	731,000	25,100	1,940,000
April	1,050	60,800	29,000	421,000	26,700	1,820,000
May	864	78,800	26,800	450,000	23,600	1,690,000
June	233	19,300	149,000	1,780,000	23,300	1,680,000
July	1,950	26,400	47,900	519,000	23,700	1,920,000
August	21,200	676,000	51,300	708,000	18,300	1,470,000
September	447	39,700	54,400	677,000	14,200	1,360,000
October	3,860	196,000	62,200	926,000	16,700	1,210,000
November	350	42,000	62,200	632,000	18,900	1,780,000
December:						
Canada	192	30,900	9,240	193,000	4,650	650,000
France	--	--	4,430	59,200	242	137,000
Germany	--	--	18,600	218,000	5,040	171,000
Italy	--	--	--	--	15	3,820
Japan	150	8,430	--	--	2,890	106,000
Singapore	--	--	414	9,350	--	--
Switzerland	--	--	--	--	2	10,600
Taiwan	--	--	5,740	87,300	--	--
Tunisia	--	--	6,320	112,000	--	--
United Kingdom	--	--	14,700	333,000	7,020	472,000
Total	342	39,400	59,400	1,010,000	19,900	1,550,000
January-December	33,600	1,320,000	726,000	9,390,000	238,000	18,600,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Customs value.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF COBALT MATERIALS¹

(Kilograms, gross weight of material, except as noted)

Period	Unwrought cobalt, powders, matte, waste and scrap ²		Oxides and hydroxides		Salts and compounds ³		Total cobalt content for the month ⁵	Cobalt content, year to date ^{5,6}
	Quantity	Value ⁴	Quantity	Value ⁴	Quantity	Value ⁴		
2005:								
December	90,100	\$3,130,000	110,000	\$2,410,000	49,200	\$275,000	181,000	2,440,000
January-December	1,670,000	60,600,000	829,000	17,100,000	704,000	3,820,000	2,440,000	XX
2006:								
January	96,100	3,850,000	108,000	2,610,000	51,500	317,000	187,000	187,000
February	96,200	3,960,000	91,800	2,170,000	43,400	308,000	173,000	359,000
March	232,000	9,530,000	93,800	2,030,000	76,300	518,000	318,000	678,000
April	326,000	12,700,000	123,000	2,710,000	19,900	177,000	419,000	1,100,000
May	134,000	4,780,000	83,300	2,060,000	79,800	461,000	213,000	1,310,000
June	157,000	3,980,000	66,000	1,680,000	50,300	111,000	217,000	1,530,000
July	150,000	4,890,000	63,300	1,370,000	33,200	224,000	203,000	1,730,000
August	130,000	3,650,000	91,000	2,180,000	64,900	390,000	211,000	1,940,000
September	165,000	4,500,000	109,000	3,010,000	20,900	163,000	249,000	2,190,000
October	235,000	3,650,000	62,300	1,800,000	15,500	168,000	284,000	2,470,000
November	109,000	2,200,000	91,200	2,180,000	31,500	171,000	183,000	2,660,000
December	103,000	2,750,000	114,000	3,020,000	48,100	293,000	196,000	2,850,000
January-December	1,930,000	60,500,000	1,100,000	26,800,000	535,000	3,300,000	2,850,000	XX

XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other intermediate products of cobalt metallurgy and unwrought cobalt alloys.

³Cobalt acetates and cobalt chlorides.

⁴Free alongside ship (f.a.s.) value.

⁵Estimated from gross weights.

⁶Year to date may include revisions to prior months.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.

TABLE 7
U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,
AND CONCENTRATES¹

(Kilograms, gross weight of material, except as noted)

Period	Wrought cobalt and cobalt articles		Cobalt ore and concentrates	
	Quantity	Value ²	Quantity	Value ²
2005:				
December	204,000	\$8,800,000	69,200	\$562,000
January-December	2,340,000	91,800,000	729,000	12,100,000
2006:				
January	188,000	7,160,000	5,150	129,000
February	157,000	7,530,000	6,390	139,000
March	219,000	8,340,000	28,000	893,000
April	183,000	8,250,000	69,200	1,170,000
May	115,000	5,260,000	19,700	493,000
June	112,000	6,110,000	31,800	423,000
July	130,000	7,020,000	81,200	1,320,000
August	140,000	6,350,000	6,690	162,000
September	165,000	8,040,000	107,000	585,000
October	178,000	8,400,000	59,700	1,410,000
November	209,000	9,960,000	20,800	716,000
December	185,000	7,980,000	59,200	1,700,000
January-December	1,980,000	90,400,000	495,000	9,130,000

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Free alongside ship (f.a.s.) value.

Source: U.S. Census Bureau, with adjustments by the U.S. Geological Survey.